

عنوان مقاله:

Effects of Methanolic Extract of Aloe vera on C-Reactive Protein and White Blood Cell Count of Wistar Rats With Inflammation

محل انتشار:

مجله بیوشیمی پزشکی، دوره 11، شماره 2 (سال: 1402)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Arinze Favour Anyiam

Emmanuel Anyachukwu Irondi

Ejeatuluchukwu Obi

Onyinye Cecilia Arinze-Anyiam

Pius Omoruyi Omosigho

Musa Abidemi Muhibi

Ayodele Olusola Ilesanmi

Okelola Odunayo Oluwatimilehin

Blessing Okezie

خلاصه مقاله:

Background: It has been known for centuries that plants and plant-derived chemicals are useful in treating diseases, with Aloe vera being one of the biologically active plants. A significant role is played by the C-reactive protein (CRP) in many inflammatory conditions, while leukocytes play an integral role in the response of the immune system to infectious diseases. Objectives: This study explored the potential anti-inflammatory effects of Aloe vera methanolic extract on the total white blood cell (TWBC) count and CRP levels in Wistar rats received formalin. Methods: A total of ۲۵ Wistar rats were divided into five groups (A to E), with group A serving as the control and the other groups receiving formalin to induce inflammation, followed by increasing doses of Aloe vera extract. The CRP level was measured using an enzyme-linked immunosorbent assay (ELISA) kit, and the TWBC count was determined using a Sysmex haematology autoanalyzer. Results: Research findings showed that ۲۰۰ mg of Aloe vera methanolic extract effectively reduced the CRP level ( $0.056 \pm 0.0027$ ) ( $P=0.04$ ), while ۶۰۰ mg of the extract significantly increased the TWBC count ( $13.92 \pm 4.757$ ) ( $P=0.03$ ). Conclusion: These findings suggest that Aloe vera extract may be an effective natural supplement for improving the immune system function and reducing inflammation in the body. However, further research is needed to fully understand the underlying mechanisms for these effects and to determine the optimal doses and potential side effects.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1933432>

